

MAR 14 2012
MAR 14 2012
THOMAS G. BRUTON
CLERK, U.S. DISTRICT COURT

MAR 14 2012
MAR 14 2012

No. 11 CR 458

Violation: Title 18, United States Code, Section 1832(a)(2) and (a)(4)

SUPERSEDING INDICTMENT

JUDGE DARRAH

MAGISTRATE JUDGE MASON

1. At times material to this indictment:

a. CME Group, Inc. ("CME") was located in Chicago, Illinois, and was

a trading exchange company that operated an electronic trading platform, called Globex, as well as open outcry trading facilities. The majority of the trades made through CME were conducted on Globex, and traders using the Globex trading platform transacted trades from locations throughout the United States and overseas.

b. CME also operated a central counter party clearing service that provided clearing and settlement services for exchange-traded contracts and cleared over-the-counter derivatives transactions. CME also offered market data services, including live quotes, delayed quotes, market reports, and historical data services.

c. CME maintained a code of conduct, a company handbook, and policies on using and protecting CME electronic data.

i. The code of conduct informed employees that CME possessed, and employees had access to, confidential and sensitive information including technological information concerning CME's systems. The code of conduct also

instructed employees to follow all company policies and procedures relating to the protection of confidential information.

ii. According to the employee handbook, electronic information to which employees had access was the property of CME and was provided for CME business purposes only. The handbook also warned that employees who had access to confidential information, such as trade secrets, were responsible for safeguarding that information. The company handbook also directed employees to review CME's systems use policies.

iii. The Information Security Acceptable Use Policy instructed employees that all CME information, including internal documents, policies, corporate strategies, and trade secrets, were considered confidential. This policy prohibited employees from (i) violating CME's copyright, trade secret, patent, or other intellectual property rights; (ii) exporting software, technical information, encryption software, or technology; and (iii) engaging in security breaches by accessing server data, unless doing so was within the scope of the employee's regular job duties.

iv. The Data Classification Policy instructed employees on how to manage CME's "confidential" and "highly sensitive" information. This policy prohibited employees from disseminating confidential or highly sensitive information outside of CME without first obtaining a written confidentiality agreement from the intended recipient of the information. The policy also required that, before disseminating confidential and highly sensitive information outside of CME, employees first had to receive the approval of the author of the information or the CME employee responsible for the information.

d. CME required each employee each year to review CME's code of conduct and employee handbook. Defendant CHUNLAI YANG certified that he reviewed the code of conduct and employee handbook and that he agreed to abide by CME's policies.

CME's Computer Code

e. CME created Globex, which was a set of electronic trading platform computer programs that allowed market participants to buy and sell from any place at any time. As part of Globex, CME created (i) a trading engine to support its futures market; (ii) a program designed to provide pre-trade execution risk controls that enable clearing firms risk administrators to set credit limits; (iii) a program for allowing traders to access historical price information; (iv) a trading application operated from hand-held devices used by floor traders; (v) a program that allowed traders to integrate CME market data into trading; and (vi) a computer program that served as the gateway into the Globex trading platform.

f. CME created Globex for its own use and did not make it publically available. The electronic trading platform was utilized by traders and other third parties, but the source code and algorithms that made up the supporting programs discussed above were proprietary confidential business property of CME and constituted CME trade secrets.

g. On June 22, 2010, CME entered into a commercial transaction with an entity located outside the United States under which CME agreed to develop an electronic trading platform jointly with the overseas partner entity based on the source code of the CME Globex system. Under the terms of the agreement, CME licensed the

Globex source code to this overseas partner and such partner is contractually obligated to maintain confidentiality of the Globex source code.

CME's Security Measures

h. CME took several security precautions to restrict access to its computer code, including, but not limited to:

i. When each CME employee logged onto his computer, a warning message appeared, which stated that: (i) the system was to be used for authorized CME business purposes only; (ii) any unauthorized access or activity was a violation of CME policy and could be a violation of law; and (iii) all activity on the system was subject to monitoring in case of possible security violations.

ii. To log into the CME computer system, each employee had to create a unique password. CME required its employees to change their passwords every 90 days.

iii. CME kept its computer source code, including the programs discussed in paragraph 1(e) above, on a specific network computer system. CME restricted employee access to this system and only granted access to those employees with certain job credentials who had a need to have access to one or more codes stored on the system. To access this system, each employee had to enter a secure area on CME's server through an additional log-in process that required the employee to enter an employee-specific password, which was the same password that employee used to log into the CME computer system.

The Defendant

i. From in or around 2000 through on or about July 1, 2011, defendant YANG was an employee of CME. At the time that YANG's employment with CME ended, YANG was a senior software engineer in the Technology & Enterprise Computing Division, in the Front Ends Systems Technology Department. YANG's responsibilities included writing computer code. Because of YANG's position at CME, CME granted YANG access to the Globex software programs.

Downloaded Files

j. Between approximately late-2010 and on or about June 30, 2011, defendant YANG: (i) downloaded over 25,000 files containing CME computer source code from CME's secure internal computer system to his CME-issued work computer; (ii) then transferred many of these computer files from his work computer to his personal USB flash drives, which defendant YANG plugged into his work computer; and (iii) then transferred many of the computer files from his USB flash drives to his personal computers and hard drives, located at his home.

k. In particular:

i. On or about December 8, 2010, defendant YANG downloaded a file with hash value "EBFDCADFDF71C14543880F6E88DC535F" which contained trade secrets of CME, from the CME secure internal computer system onto the C:\ drive of his CME-issued work computer.

ii. On or about February 28, 2011, defendant YANG transferred file EBFDCADFDF71C14543880F6E88DC535F from his CME work computer to a USB flash drive.

iii. On or about February 28, 2011, defendant YANG transferred file EBFDCADFDF71C14543880F6E88DC535F from the USB flash drive to his personal computer that he maintained at home.

1. Also at least between approximately late-2010 and on or about June 30, 2011, defendant YANG downloaded to his CME-issued work computer and also printed onto paper numerous CME internal manuals and guidelines describing how many of the computer files that comprise Globex operate and how these computer files interact with each other.

Defendant YANG's Business Venture in China

m. Defendant YANG and two business partners, Individual A and Individual B, developed business plans to form a business referred to as the Tongmei (Gateway to America) Futures Exchange Software Technology Company ("Gateway"). The purpose of Gateway was to increase the trading volume at the Zhangjiagang, China chemical electronic trading exchange (the "Zhangjiagang Exchange").

n. According to business proposals:

i. The Zhangjiagang Exchange was to become a transfer station to China for advanced technologies companies around the world, and defendant YANG expected that Gateway would provide the Zhangjiagang Exchange with technology to allow for high trading volume, high trading speeds, and multiple trading functions. Defendant YANG was to become Gateway's president. Gateway needed 8 million RMB (approximately \$1.25 million) of initial capital.

ii. To help the Zhangjiagang Exchange attract more customers and generate higher profits, Gateway proposed to expand the Zhangjiagang Exchange's

software by: (i) providing customers with more ways of placing orders, such as good-till-cancel orders, good-till-date orders, and stop-loss orders; (ii) connecting the Zhangjiagang Exchange database's storage systems and matching systems; (iii) rewriting the trading system software in JAVA computer programming language; (iv) raising the system's capacity and speed by modifying communication lines and structures; and (v) developing trading software based on FIX computer coding language.

o. Defendant YANG engaged in contract negotiations on behalf of Gateway with the Zhangjiagang Free Trade Board located in Zhangjiagang, China for Gateway to provide computer source code to the Zhangjiagang Exchange.

p. Defendant YANG, on behalf of Gateway, engaged in discussions with other electronic trading exchanges in China to provide the same systems upgrade to those exchanges as Gateway was to perform for the Zhangjiagang Exchange.

2. On or about February 28, 2011, at Chicago, in the Northern District of Illinois,

CHUNLAI YANG,

defendant herein, with intent to convert a trade secret to the economic benefit of someone other than the owner thereof, knowingly and without authorization did, and attempted to, copy, duplicate, download, upload, replicate, and transmit one or more trade secrets belonging to CME, specifically, proprietary computer file EBFDCADFDF71C14543880F6E88DC535F, such trade secrets being related to or

included in products produced for and placed in interstate and foreign commerce, intending and knowing that the offense would injure CME.

In violation of Title 18, United States Codes, Section 1832(a)(2) and (a)(4).

COUNTS TWO THROUGH TEN

The SPECIAL SEPTEMBER 2011 GRAND JURY further charges:

1. Paragraph 1 of Count One is incorporated here.
2. On or about dates listed below, each such date constituting a separate count of this superseding indictment, at Chicago, in the Northern District of Illinois,

CHUNLAI YANG,

defendant herein, with intent to convert a trade secret to the economic benefit of someone other than the owner thereof, knowingly and without authorization did, and attempted to, copy, duplicate, download, upload, replicate, and transmit one or more trade secrets belonging to CME, specifically, proprietary computer files identified below by their hash values, each such trade secret being related to or included in products produced for and placed in interstate and foreign commerce, intending and knowing that the offense would injure CME:

COUNT	DATE	FILE HASH VALUE
Two	April 7, 2010	FCCBB1225B9C0E4B77773ECE7DA1907A
Three	May 7, 2010	37531ACD99CF437EE49702E5B7665B0F
Four	June 22, 2010	41AD49634F2B0B3B9D230893404B7E4F
Five	June 22, 2010	74147E63316A020B3D252EF8EB7154D6
Six	October 29, 2010	3EB1FC83724153F86D0D3D481FF2F186
Seven	October 29, 2010	15AA6710BEAF585938F4300DF113516E
Eight	October 29, 2010	B6425C0ECA50A1651DC7258EABA238B9
Nine	January 2, 2011	C8A273B8350A49E87F2981FF46EAE94C
Ten	February 28, 2011	4455BDC275B8F5E7680836193686A9B0

All in violation of Title 18, United States Codes, Section 1832(a)(2) and (a)(4).

FORFEITURE ALLEGATION

THE SPECIAL SEPTEMBER 2011 GRAND JURY further alleges:

1. As a result of the violations of Title 18, United States Code, Sections 1832(a), as alleged in the foregoing Indictment,

CHUNLAI YANG

defendant herein, shall forfeit to the United States, pursuant to Title 18, United States Code, Section 1834, (i) any and all property constituting, and derived from, any proceeds the defendant obtained, directly and indirectly, as a result of the violations; and (ii) any and all or property used, and intended to be used, in any manner or part, to commit and facilitate the commission of the violations, including the following:

- a. Compaq laptop computer,
Serial Number P3005USP200X640WC51E;
- b. HP mini laptop computer, Serial Number CNF0023GBD;
- c. Dell Optiplex computer, Serial Number 6YG5G01;
- d. Dell Optiplex, Part Number SX270, Serial Number 91J4L31;
- e. Iomega external hard drive, Serial Number 99A8343DB6;
- f. Seagate external hard drive, Model ST310212A, Serial
Number 5EGOAP5D;
- g. Maxtor external hard drive, Part Number MX6L020J1, Serial
Number 6612119139381;
- h. Compaq computer, Part Number 116400-005 (without hard drive);
- i. HP Compaq computer Model NC 6000, Serial Number CNU
435F6P2 (without hard drive);
- j. Transcend USB flash drive, labeled "May Yang";
- k. Datatraveler 8GB USB flash drive, labeled "3_23 GB free";

- l. USB flash drive, labeled "copy to from small flash";
- m. Kingston USB flash drive, labeled "13.3 GB free";
- n. Kingston USB flash drive, blue and white, labeled "carry on 4.89 GB Free";
- o. SanDisk 4MB multi media card in hard plastic case;
- p. 256MB USB flash drive, Model JD 256-40-5008, labeled "Lily Yang";
- q. USB flash drive key chain, labeled "EMD";
- r. USB flash drive, in leather case;
- s. USB flash drive, concealed in a pen;
- t. 3.5" USB 2.0 external aluminum hard drive enclosure;
- u. 2.0 GB Memory stick duo adapter in opened case;

2. If any of the property described above as being subject to forfeiture pursuant to Title 18, United States Code, Section 1834, as a result of any act or omission of the defendants:

- a. cannot be located upon the exercise of due diligence;
- b. has been transferred to, sold to, or deposited with a third person;
- c. has been placed beyond the jurisdiction of the Court;
- d. has been substantially diminished in value;
- e. has been commingled with other property which cannot be subdivided without difficulty;

the United States of America shall be entitled to forfeiture of substitute property under the provisions of Title 21, United States Code, Section 853(p), as incorporated by Title 18, United States Code, Section 1834.

All pursuant to Title 18, United States Code, Section 1834.

A TRUE BILL:

FOREPERSON

UNITED STATES ATTORNEY